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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/659,983D

DATE: 03/05/2002
TIME: 09:54:12

Input Set : A:\21834518 seq list.txt
Output Set: N:\CRF3\03052002\I659983D.raw

5 <110> APPLICANT: Meloen, Robert Hans
 7 Oonk, Hendrica Berendina
 11 <120> TITLE OF INVENTION: An Improved Peptide, Immunogenic Composition and Vaccine or
 Medical
 12 Preparation, a Method to Immunise Animals Against the Hormone LHRH, and
 13 Analogs of the LHRH Tandem Repeat Peptide and their Use as Vaccine
 17 <130> FILE REFERENCE: 2183-4518US
 21 <140> CURRENT APPLICATION NUMBER: 09/659,983D
 23 <141> CURRENT FILING DATE: 2000-09-12
 27 <150> PRIOR APPLICATION NUMBER: US 09/274,048
 29 <151> PRIOR FILING DATE: 1999-03-22
 33 <150> PRIOR APPLICATION NUMBER: US 08/981,557
 35 <151> PRIOR FILING DATE: 1995-06-07
 39 <150> PRIOR APPLICATION NUMBER: PCT/NL96/00223
 41 <151> PRIOR FILING DATE: 1996-06-06
 45 <150> PRIOR APPLICATION NUMBER: US 08/447,298
 47 <151> PRIOR FILING DATE: 1995-06-07
 51 <150> PRIOR APPLICATION NUMBER: US 08/476,013
 53 <151> PRIOR FILING DATE: 1995-06-07
 57 <160> NUMBER OF SEQ ID NOS: 13
 61 <170> SOFTWARE: PatentIn version 3.1
 65 <210> SEQ ID NO: 1
 67 <211> LENGTH: 10
 69 <212> TYPE: PRT
 71 <213> ORGANISM: Sus scrofa
 75 <220> FEATURE:
 77 <221> NAME/KEY: MISC_FEATURE
 79 <222> LOCATION: (1)..(1)
 81 <223> OTHER INFORMATION: X=pyroglutamic acid
 85 <220> FEATURE:
 87 <221> NAME/KEY: MISC_FEATURE
 89 <222> LOCATION: (10)..(10)
 91 <223> OTHER INFORMATION: X=Gly-NH₂
 95 <400> SEQUENCE: 1
 W/ > 97 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
 98 1 5 10
 101 <210> SEQ ID NO: 2
 103 <211> LENGTH: 10
 105 <212> TYPE: PRT
 107 <213> ORGANISM: Homo sapiens
 111 <220> FEATURE:
 113 <221> NAME/KEY: MISC_FEATURE
 115 <222> LOCATION: (1)..(1)
 117 <223> OTHER INFORMATION: X=pyroglutamic acid

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121 <220> FEATURE:
 123 <221> NAME/KEY: MISC_FEATURE
 125 <222> LOCATION: (10)..(10)
 127 <223> OTHER INFORMATION: X=Gly-NH2
 131 <400> SEQUENCE: 2
 W--> 133 Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
 134 1 5 10
 137 <210> SEQ ID NO: 3
 139 <211> LENGTH: 20
 141 <212> TYPE: PRT
 143 <213> ORGANISM: Artificial Sequence
 147 <220> FEATURE:
 149 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
 150 GnRH/ LHRH.
 152 <220> FEATURE:
 154 <221> NAME/KEY: MISC_FEATURE
 156 <222> LOCATION: (1)..(1)
 158 <223> OTHER INFORMATION: X=pyroglutamic acid or Gln with attached tail of one or more addi
 159 tional amino acids
 163 <220> FEATURE:
 165 <221> NAME/KEY: MISC_FEATURE
 167 <222> LOCATION: (3)..(3)
 169 <223> OTHER INFORMATION: X=Trp or N(indole)-formyl-tryptophan
 173 <220> FEATURE:
 175 <221> NAME/KEY: SITE
 177 <222> LOCATION: (10)..(11)
 179 <223> OTHER INFORMATION: there is either a direct bond or a spacer group between Gly at po
 180 sition 10 and Gln at position 11
 184 <220> FEATURE:
 186 <221> NAME/KEY: MISC_FEATURE
 188 <222> LOCATION: (13)..(13)
 190 <223> OTHER INFORMATION: X=Trp or N(indole)-formyl-tryptophan
 194 <220> FEATURE:
 196 <221> NAME/KEY: MISC_FEATURE
 198 <222> LOCATION: (20)..(20)
 200 <223> OTHER INFORMATION: X=Gly-NH2 or Gly with attached tail or one or more amino acids
 204 <220> FEATURE:
 206 <221> NAME/KEY: REPEAT
 208 <222> LOCATION: (10)..(19)
 210 <223> OTHER INFORMATION: repeat of amino acid sequence between positions 10-19 where the a
 211 mino acids in positions 10-19 are present(at least once
 215 <400> SEQUENCE: 3
 W--> 217 Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Gln His Xaa Ser Tyr Gly
 218 1 5 10 , 15
 W--> 221 Leu Arg Pro Xaa
 222 20
 225 <210> SEQ ID NO: 4
 227 <211> LENGTH: 21

229 <212> TYPE: PRT

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231 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
237 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms

238 GnRH/ LHRH.
240 <220> FEATURE:
242 <221> NAME/KEY: MISC_FEATURE
244 <222> LOCATION: (1)..(1)
246 <223> OTHER INFORMATION: X=pyroglutamic acid
250 <220> FEATURE:
252 <221> NAME/KEY: MISC_FEATURE
254 <222> LOCATION: (6)..(6)
256 <223> OTHER INFORMATION: X=D-Lys
260 <220> FEATURE:
262 <221> NAME/KEY: MISC_FEATURE
264 <222> LOCATION: (11)..(11)
266 <223> OTHER INFORMATION: X=Gln or Gln preceded by a spacer
270 <220> FEATURE:
272 <221> NAME/KEY: MISC_FEATURE
274 <222> LOCATION: (16)..(16)
276 <223> OTHER INFORMATION: X=D-Lys
280 <220> FEATURE:
282 <221> NAME/KEY: MISC_FEATURE
284 <222> LOCATION: (21)..(21)
286 <223> OTHER INFORMATION: X=Cys-NH2
290 <400> SEQUENCE: 4

W--> 292 Xaa His Trp Ser Tyr Xaa Leu Arg Pro Gly Xaa His Trp Ser Tyr Xaa
W--> 293 1 5 10 15

W--> 296 Leu Arg Pro Gly Xaa
297 20

300 <210> SEQ ID NO: 5
302 <211> LENGTH: 21
304 <212> TYPE: PRT

306 <213> ORGANISM: Artificial Sequence

310 <220> FEATURE:

312 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against
forms

313 GnRH/ LHRH.
315 <220> FEATURE:
317 <221> NAME/KEY: MISC_FEATURE
319 <222> LOCATION: (1)..(1)
321 <223> OTHER INFORMATION: X=pyroglutamic acid
325 <220> FEATURE:
327 <221> NAME/KEY: MISC_FEATURE
329 <222> LOCATION: (6)..(6)
331 <223> OTHER INFORMATION: D-Lys
335 <220> FEATURE:
337 <221> NAME/KEY: MISC_FEATURE
339 <222> LOCATION: (11)..(11)
341 <223> OTHER INFORMATION: X=Gln or Gln preceded by a spacer
345 <220> FEATURE:

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Input Set : A:\21834518 seq list.txt
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347 <221> NAME/KEY: MISC_FEATURE
 349 <222> LOCATION: (16)..(16)
 351 <223> OTHER INFORMATION: X=D-Lys
 355 <220> FEATURE:
 357 <221> NAME/KEY: MISC_FEATURE
 359 <222> LOCATION: (21)..(21)
 361 <223> OTHER INFORMATION: X=Cys-NH2
 365 <400> SEQUENCE: 5
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 368 1 . 5 . 10 . 15
 W--> 371 Leu Arg Pro Gly Xaa
 372 . 20
 375 <210> SEQ ID NO: 6
 377 <211> LENGTH: 21
 379 <212> TYPE: PRT
 381 <213> ORGANISM: Artificial Sequence
 385 <220> FEATURE:
 387 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against

forms

388 GnRH/ LHRH.
 390 <220> FEATURE:
 392 <221> NAME/KEY: MISC_FEATURE
 394 <222> LOCATION: (1)..(1)
 396 <223> OTHER INFORMATION: X=pyroglutamic acid
 400 <220> FEATURE:
 402 <221> NAME/KEY: MISC_FEATURE
 404 <222> LOCATION: (6)..(6)
 406 <223> OTHER INFORMATION: X=D-Lys
 410 <220> FEATURE:
 412 <221> NAME/KEY: MISC_FEATURE
 414 <222> LOCATION: (11)..(11)
 416 <223> OTHER INFORMATION: X=Gln or Gln preceded by a spacer
 420 <220> FEATURE:
 422 <221> NAME/KEY: MISC_FEATURE
 424 <222> LOCATION: (16)..(16)
 426 <223> OTHER INFORMATION: X=D-Lys
 430 <220> FEATURE:
 432 <221> NAME/KEY: MISC_FEATURE
 434 <222> LOCATION: (21)..(21)
 436 <223> OTHER INFORMATION: X=Cys-NH2
 440 <400> SEQUENCE: 6
 W--> 442 Xaa His Trp Ser Tyr Xaa Leu Ala Pro Gly Xaa His Trp Ser Tyr Xaa
 443 1 . 5 . 10 . 15
 W--> 446 Leu Ala Pro Gly Xaa
 447 . 20
 450 <210> SEQ ID NO: 7
 452 <211> LENGTH: 21
 454 <212> TYPE: PRT
 456 <213> ORGANISM: Artificial Sequence
 460 <220> FEATURE:

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/659,983D

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TIME: 09:54:13

Input Set : A:\21834518 seq list.txt

Output Set: N:\CRF3\03052002\I659983D.raw

L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:632 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:715 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:780 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:926 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:930 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:1001 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:1005 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13